# **NASA** Facts

National Aeronautics and Space Administration

Langley Research Center Hampton, Virginia 23681-0001 804 864-3293





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## The High Temperature Polymer of Future

LaRC™ RP 46 represents a new family of multipurpose resins- called polyimides- developed at NASA Langley Research Center in Hampton, Va. It provides excellent processability and mathematical properties. It is the most cost effective ultra-high-temperature resin known today.

#### **Benefits**

LaRC™ RP 46 is inexpensive, easy to use and non-toxic. It has several commercial uses. Its primary function is for making lightweight, high-strength and high stiffness advanced composites for aircraft and automotive engine components. It is currently being evaluated for printed circuit boards, adhesives, structural forms, resin-molded hardware, advanced coatings and thin films. It has all the important characteristics required for many high temperature applications operating at 500-700 degrees Fahrenheit in extended time periods.

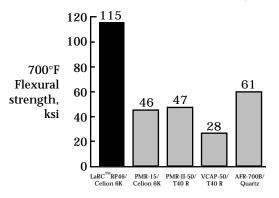
#### **Options for Commercialization**

NASA holds a patent on LaRC<sup>TM</sup> RP 46 which is immediately available for licensing. NASA also seeks industrial partners to cooperatively develop commercial products and processes based on the LaRC<sup>TM</sup> RP 46 invention.

This commercial opportunity is part of the NASA Technology Transfer Program. The objective of this program is to proactively involve the private sector in NASA's research programs to ensure that the technology developed will have maximum commercial impact.

LaRC<sup>TM</sup>RP46 has by Far the Highest 700°F Performance Per Dollar Among All the Existing PMR Polyimides

### 700°F Composite Flexural Strength



#### **Estimated Resin Cost**

